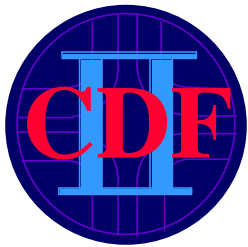




## Run Control

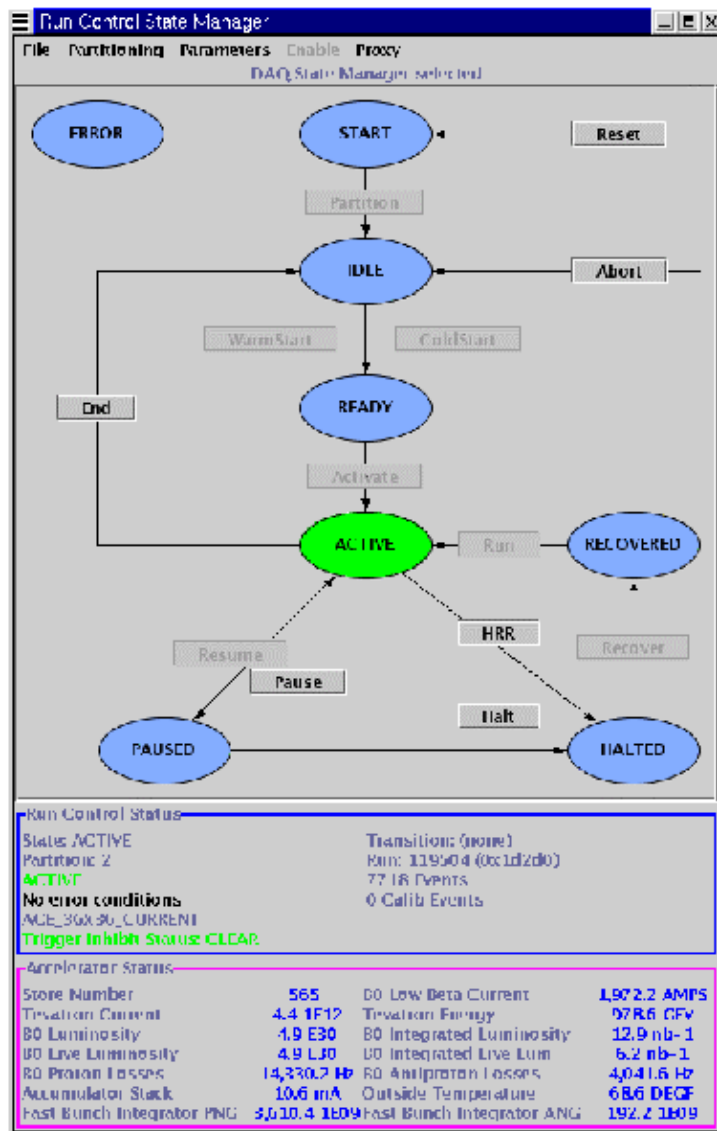
W. Badgett  
Run Control &  
Run Configuration  
01/16/2002

How to start, configure  
and operate CDF  
Run Control



## Run Control, main window

W. Badgett  
Run Control &  
Run Configuration  
01/16/2002



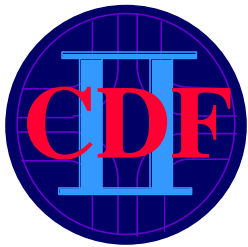
Main Run Control Window:  
Includes RC State Manager,  
Configuration pull-down  
menus, Run Control Status,  
and Accelerator Status panels

Start Run Control:  
setup for  
rc

(ace uses *cdfdaq* account)

*Just 3 steps to run!*

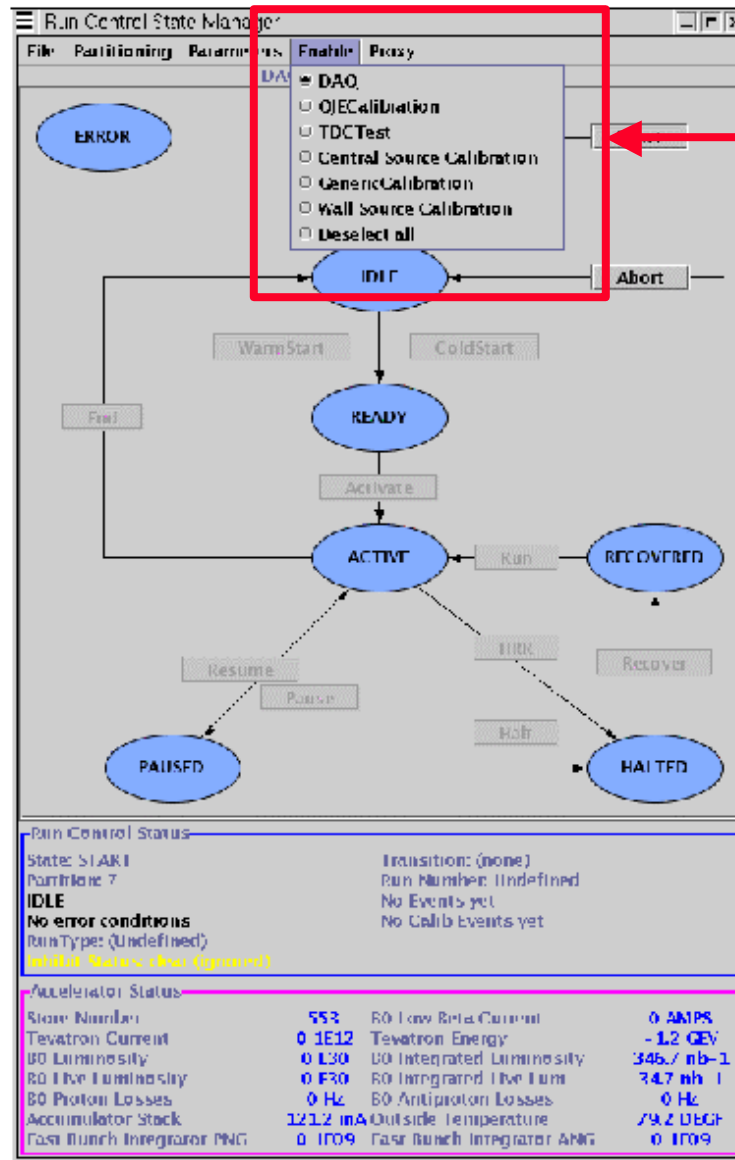
1. *Select State Manager*
  2. *Select Partition*
  3. *Select Configuration*
- Run!*



# State Manager Selection

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Run Control &  
Run Configuration  
01/16/2002

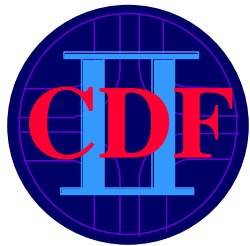
Step 1



## Select State Manager:

- Usually **DAQ**
  - GenericCalibration for calibrations unless specific menu item for given run type: e.g., QIE Calibration
- Source, TDC testing are primarily for experts

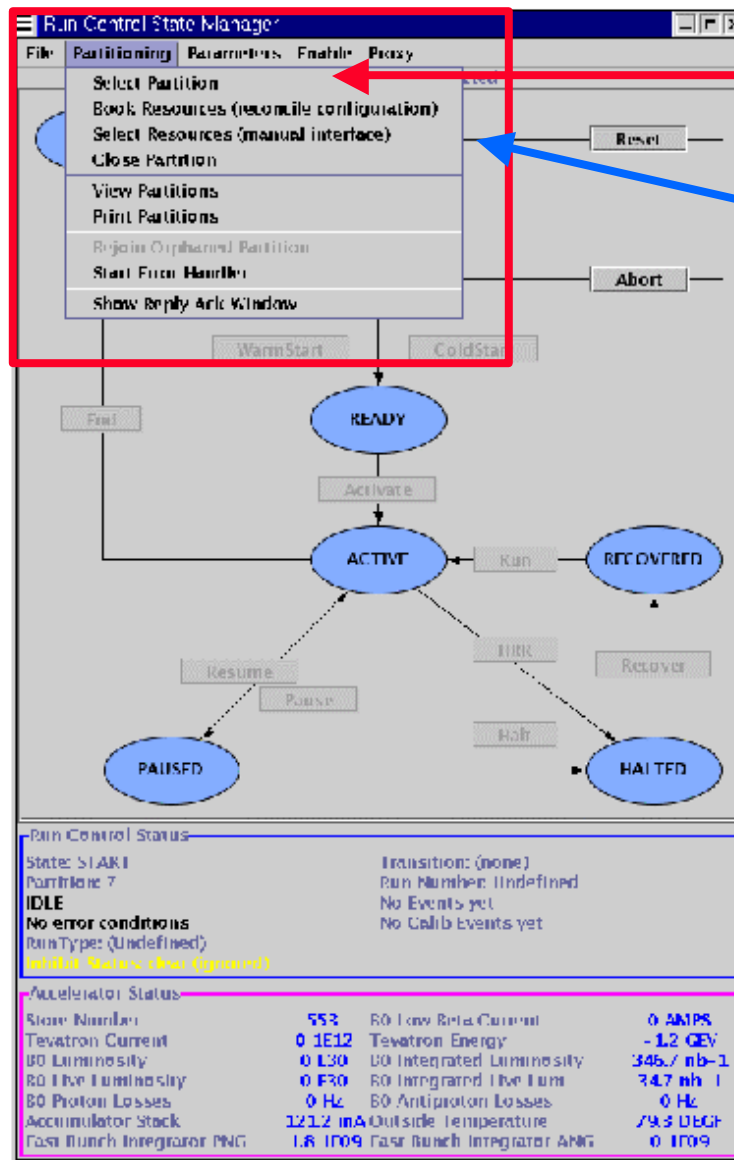
The State Manager determines the flow of control when cycling through runs



Step 2

## Select Partition

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Run Control &  
Run Configuration  
01/16/2002



Select partition

Select or view  
resources  
manually

Each Run Control Session  
must be allocate a *Partition*

Each front end crate belongs  
to no more than one *Partition*

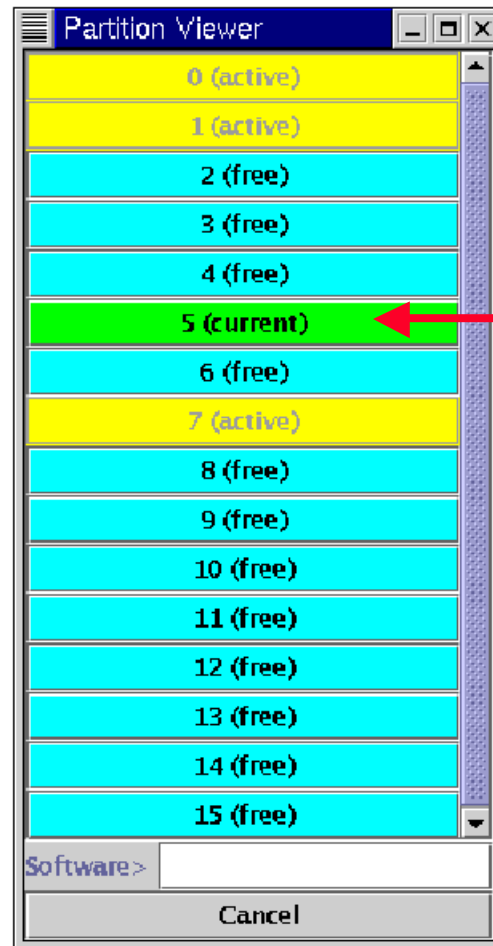
*Partitions* prevent collisions  
between sessions



## Partition Selector

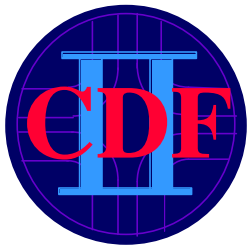
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Run Control &  
Run Configuration  
01/16/2002

Step 2a



### Select Partition:

- Cyan is free
  - Yellow is owned by another
  - Green is yours
  - Mouse over to display owner and hardware/software status
- 
- 0–7 are hardware partitions
  - 8–15 are software partitions



# Resource Selector

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Run Control &  
Run Configuration  
01/16/2002

CDF Resource Selector Partition 6

File Resources Partition

Booked resource PCAL  
Booked resource SVX  
Booked resource COT  
Failed to book resource WCAL

ResMgr>

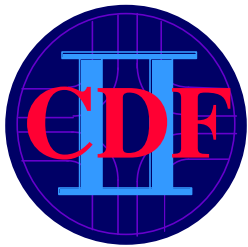
CCAL	PCAL	WCAL	COT	CMU
CMP	CMX	IMU	MUSC	HTDC
CLC	SVX	XFT	SVT	MUTR
L1CL	L1GL	L2CL	L2GL	VRB
L1	L2	L3	SEVB	SCALERS
CES	PSRC	TDC	COTPULS	COTTEST
FCAL	CALPULS			

## Select Resources:

- Cyan is entirely free
- Red is entirely owned by another partition
- Blue is partially owned by another partition
- Yellow is partially yours
- Green is entirely yours
- Mouse over to display owner

Click to book/unbook  
Right-click for more info

Step 2b  
Optional

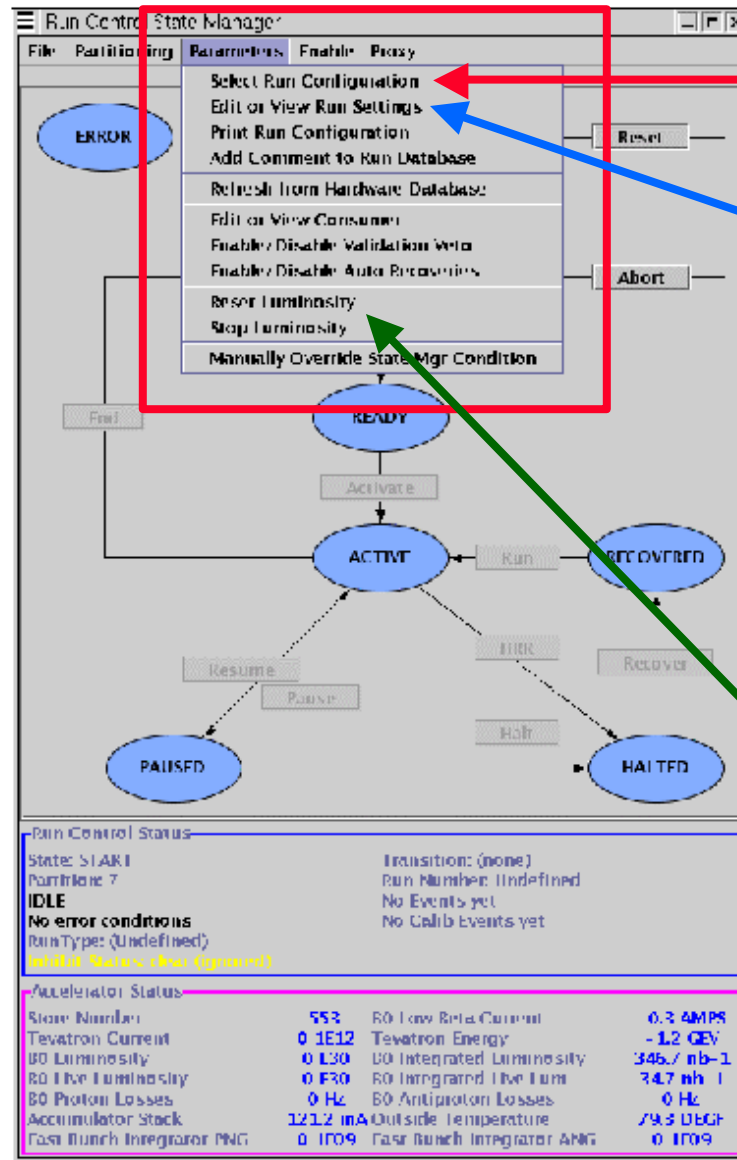


## Selecting Run Configuration

W. Badgett  
Run Control &  
Run Configuration  
01/16/2002

Step 3

After selecting a configuration, you're ready to start a run!



Select predefined run configuration

Edit or view run configuration



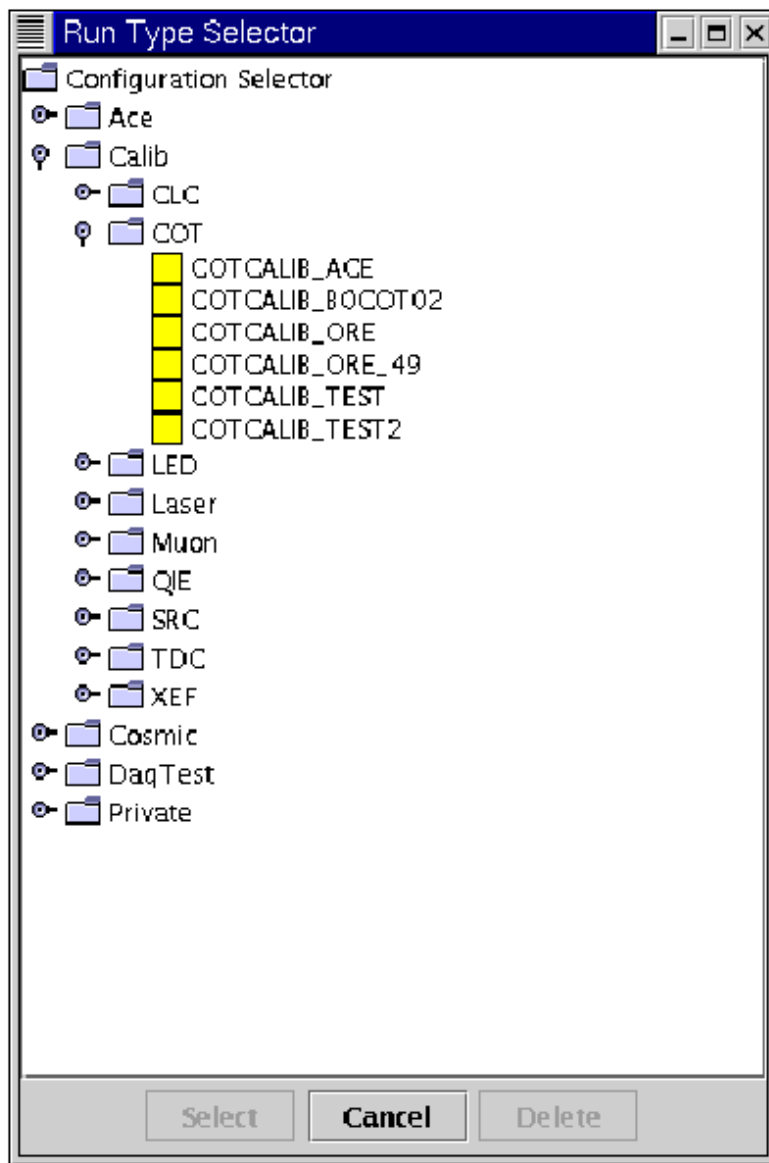
Frank sez:  
"This is the ace's most important duty!"

Reset or stop luminosity counters at beginning and end of shot



## Run Configuration Selector

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Run Control &  
Run Configuration  
01/16/2002



Select from predefined run configurations

- Ace directory contains all physics and test runs for the Ace, and is maintained by Ops Managers
- Cosmic directory for Cosmic Ray runs
- Calib directory contains calibration configurations, and is maintained by component experts in subdirectories
- Other directories for private testing purposes

*Or create your own configuration!*







# Run Settings, Expert Options

W. Badgett  
Run Control &  
Run Configuration  
01/16/2002

Run Set AAA 70X30 01.77 NT Super Bulk User Created: 2001-04-07 04:17.0 Updated: 2001-06-25 17:50 17.0

File Browse Create Triggers Data Type Inhibits

Expert:

☒ UseRed ☒ UseSec ☒ UseScaler ☒ UseIM ☒ UseLevel3Manager ☒ UseErrorHandler

☐ UseSlowControl ☐ MyronMode ☐ L1Early ☐ IgnoreError ☐ IgnoreBusy ☐ EnableFP

☐ DisableCrates ☐ DisableL1Calib ☐ StartOnB0 ☐ Svx390Mode ☐ IgnoreBC ☐ LoadOJEFNUM

☐ LoadCrAlgo ☐ LoadCrTable ☒ LoadDocs ☒ DoPromptLib

RunType: Physics TriggerType: 36x36\_1\_Coupled\_nonlineative [4,152]

SvxSet: RUN 118/30 CalorCalibSet: (none)

Output: ☐ Hibernat(SoftFw) ☒ VNR(HardFw) ☒ RunNumber ☒ DiagnosticBank ☐ ExtraBanks

L1 Mode: ☒ Standard (Fired) ☐ Calib Fixed Period ☐ Calib External Trig ☐ Calib SVX ☐ Calib Continuous ☐ Software

L2 Mode: ☐ Auto L2 Accept ☐ Auto L2 All ☐ Auto L2 Reject ☒ L2 Processors

13 Subframes: ☐ All ☐ None

Output 0: ☐ 0 ☐ 1 ☐ 2 ☐ 3

Output 1: ☒ 4 ☒ 5 ☒ 6 ☒ 7

Output 2: ☒ 8 ☒ 9 ☒ 10 ☒ 11

Output 3: ☒ 12 ☒ 13 ☒ 14 ☒ 15

Parameter	Value
Directory	/Ave
Seed	15776360
NEvent	0
RunSectionInterval	30
Integration	0
File Code	0
Calib.Ppt	0
Calib Interval	3
Interval 0	40

Consumers

☒ All Choices

Calib

☐ Add <<

☐ Remove >>

Crates

☒ All Choices

Calib

☐ Add <<

☐ Remove >>

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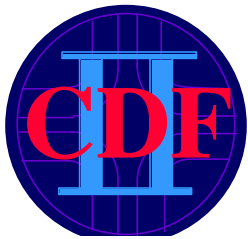
OCAL\_924

OCAL\_925

OCAL\_926

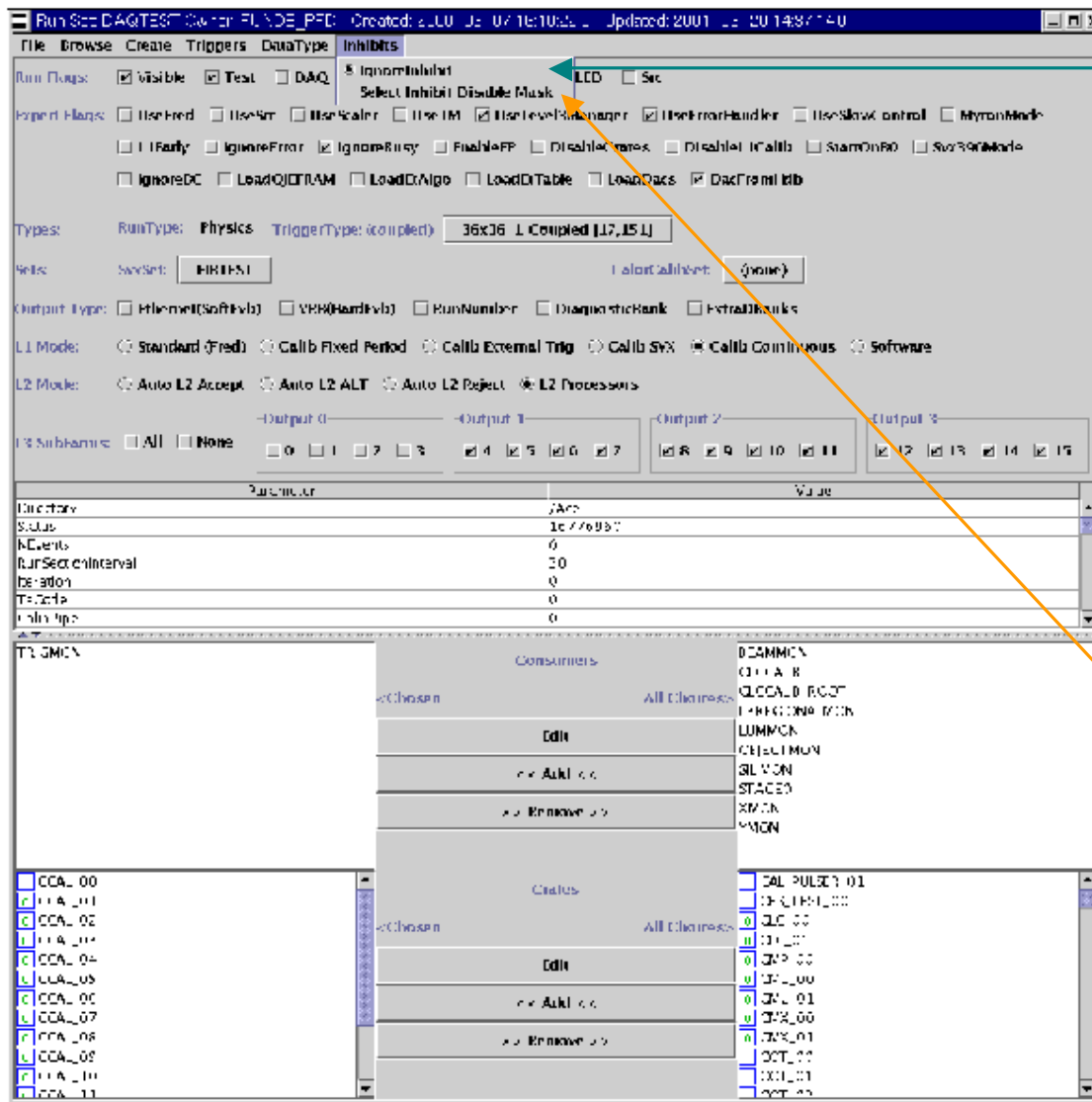
OCAL\_927

OC



# Trigger Inhibits

W. Badgett  
Run Control &  
Run Configuration  
01/16/2002

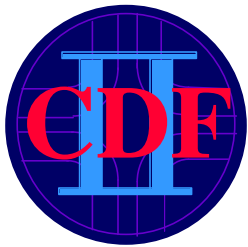


Inhibits normally used  
only during physics  
(colliding beam) runs,  
otherwise set Ignore  
Inhibit to true

Inhibit sources are tied to  
the crates and  
components you have  
chosen, and are selected  
automatically

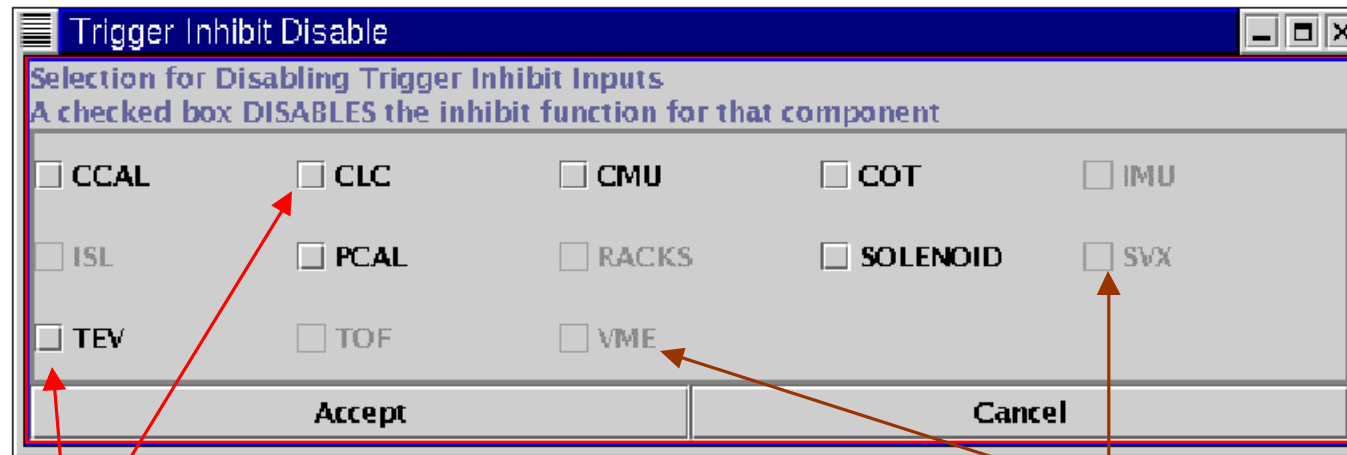
In an emergency, you may  
have to disable misbehaving  
inhibit signals

Inhibits cause data taking to  
stop, watch event rates and  
Inhibit LEDS



## Trigger Inhibit Disable Masking

W. Badgett  
Run Control &  
Run Configuration  
01/16/2002

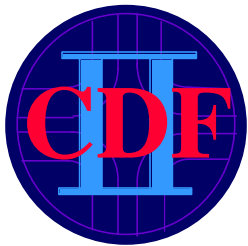


Select which components should be **disabled** from providing an inhibit signal

Greyed options are not yet working and do not contribute to inhibits

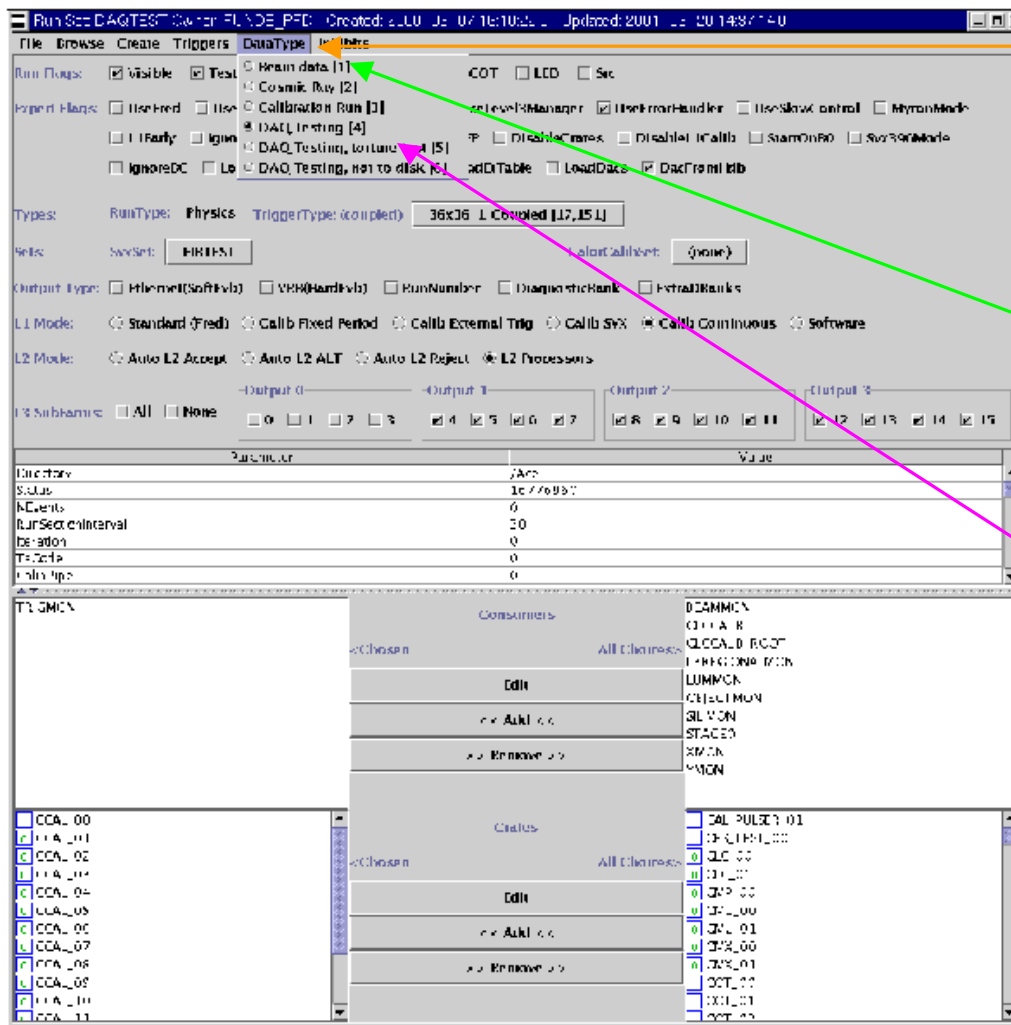
*Jonatron sez.*  
“Inhibitions are the Ace’s most important duty!”





# Data Type Selection

W. Badgett  
Run Control &  
Run Configuration  
01/16/2002



Pull-down menu in Run Settings window selects data types

Select *Beam Data* only when colliding beams are in the Tevatron

Use DAQ Testing when just exercising the system

Tony sez:  
"Selecting the Data Type is the Ace's most important Duty"





# Trigger Type Selection

W. Badgett  
Run Control &  
Run Configuration  
01/16/2002

Run Set DAQTEST Owner BLNDP PRO Created: 2010-09-17 0:10:22.0 Updated: 2011-07-01 9:07:16.0

File Browse Create **Triggers** DataType Inhibits

Expert: ☐ Use ☐ Use L3 Tag Sets ☐ Use L1M ☐ UseLevel3Manager ☒ UseErrorHandler  
☐ UseSlowControl ☐ MyRunMode ☐ L1Calib ☐ IgnoreError ☒ IgnoreBusy ☐ EnableHP  
☐ DisableCrates ☐ DisableL1Calib ☐ StartOnB0 ☐ SVX390Mode ☐ IgnoreBC ☐ LoadOJEFARM  
☐ LoadDIALgo ☐ LoadCrTable ☒ LoadDacs ☒ DacFromHds

RunType: **Physics** TriggerType: **Physics\_0\_00\_00 (6,155)**

RunSet: **HBTESI** CalorCalibSet: **(none)**

Output: ☐ Ethernet(SoftVtx) ☐ VME(HardVtx) ☐ RunNumber ☐ DiagnosticBank ☐ ExtraBanks

L1 Mode: ☒ Standard (Grid) ☐ Calib Fixed Period ☐ Calib External Trig ☐ Calib SVX ☒ Calib Continuous ☐ Software

L2 Mode: ☒ Auto L2 Accept ☐ Auto L2 All ☐ Auto L2 Reject ☐ L2 Processors

L3 Subframes: ☐ All ☐ None

Output 0: ☐ 0 ☐ 1 ☐ 2 ☐ 3

Output 1: ☐ 4 ☐ 5 ☐ 6 ☐ 7

Output 2: ☐ 8 ☐ 9 ☐ 10 ☐ 11

Output 3: ☐ 12 ☐ 13 ☐ 14 ☐ 15

Parameter	Value
Inventory	/Arc
Serial	13776360
Run Section Index	0
Run Number	30
Trigger Code	0
Calib. Type	0
Calib. Interval	42
Interval 0	1000000

Consumers

Calib. Interval: 42

Interval 0: 1000000

Consumers

DCAMON  
DCCAL00  
DCCAL01  
DCCAL02  
DCCAL03  
DCCAL04  
DCCAL05  
DCCAL06  
DCCAL07  
DCCAL08

Calib. Interval: 42

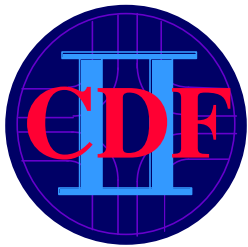
Interval 0: 1000000

Select *coupled*  
Trigger Table here  
for normal physics  
running

Select decoupled  
tables here for  
testing purposes

Coupled tables  
are fully  
specified from  
Level 1, Level 2  
through Level 3

*Synonyms:*  
Trigger Type =  
Trigger Table =  
Physics Table



## Decoupled Trigger Tables

W. Badgett  
Run Control &  
Run Configuration  
01/16/2002

Trigger Type Selector

Select a single row of parameters from the list of choices below

PHYSICSTABLE	TAG	L3	DESCRIPTION	CREATED
Physics_D_0_00	5	163	Test_L3_Filters_1stream v3 with CES patch	2001.06.29
Physics_D_0_00	5	150	Test_L3_Filters_1stream single stream all reco	2001.06.29
Physics_D_0_00	5	143	Null 2, null exe does nothing	2001.06.29
Physics_D_0_00	4	163	Test_L3_Filters_1stream v3 with CES patch	2001.06.29
Physics_D_0_00	4	150	Test_L3_Filters_1stream single stream all reco	2001.06.29
Physics_D_0_00	4	143	Null 2, null exe does nothing	2001.06.29
Physics_D_0_00	3	163	Test_L3_Filters_1stream v3 with CES patch	2001.06.29
Physics_D_0_00	3	150	Test_L3_Filters_1stream single stream all reco	2001.06.29
Physics_D_0_00	3	143	Null 2, null exe does nothing	2001.06.29
Physics_D_0_00	2	163	Test_L3_Filters_1stream v3 with CES patch	2001.06.28
Physics_D_0_00	2	150	Test_L3_Filters_1stream single stream all reco	2001.06.28
Physics_D_0_00	2	143	Null 2, null exe does nothing	2001.06.28
RATETEST	1	163	Test_L3_Filters_1stream v3 with CES patch	2001.06.26

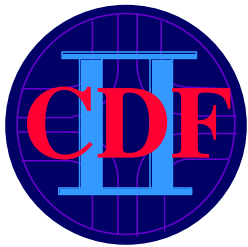
Select None Cancel

Lots of *decoupled* trigger table options, due to combinatorics of unspecified Level 3 paths

*None* is a valid option when using the calibration trigger



Kirsten sez:  
"Level 3 Rules!"



## Coupled Trigger Tables

W. Badgett  
Run Control &  
Run Configuration  
01/16/2002

Trigger Type Selector

Select a single row of parameters from the list of choices below

PHYSICSTABLE	TAG	L3	DESCRIPTION	CREATED
36x36_1_Coupled	22	153	36x36_1_Coupled v22	2001.06.27
36x36_1_Coupled	17	151	36x36_1_Coupled v17/use in case of High Luminosit...	2001.06.22
36x36_1_Coupled	16	146	36x36_1_Coupled v16, no muoStub no EmClust, new...	2001.06.20
36x36_1_Coupled_noInclusive	4	152	36x36_1_Coupled_noInclusive v3/use in case of High...	2001.06.22
36x36_1_Coupled_noInclusive	2	147	36x36_1_Coupled_noInclusive v2, no muoStub no Em...	2001.06.20
Physics_0_00	2	161	Physics_0_00 v2 with CES patch	2001.07.07
Physics_0_00	2	156	Physics_0_00 2	2001.06.29
Physics_0_00_00	6	155	Physics_0_00_00 v6	2001.06.29
Physics_0_00_00	5	154	Physics_0_00_00 v5	2001.06.27
Physics_I_0_00	1	162	Physics_I_0_00 v1 with CES patch	2001.07.07
Physics_I_0_00	1	157	Physics_I_0_00 1: With inclusive stream	2001.06.29

Select None Cancel

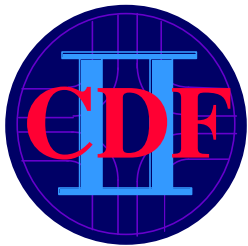
Coupled Trigger Tables are used for real physics (colliding beams) running

Your Ops Manager will tell you which one to use and which are for special test runs



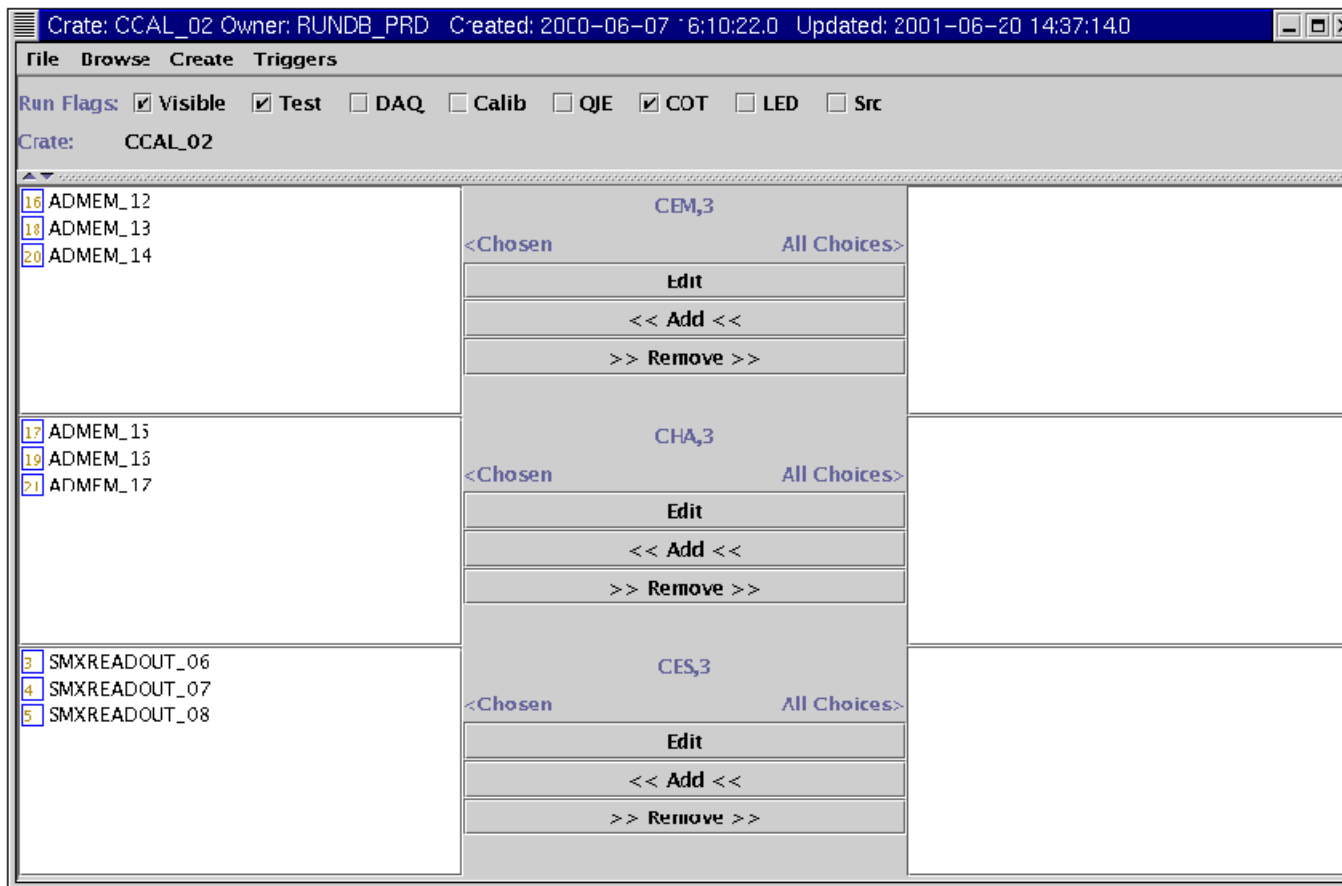
Greg Sez: "Selecting the correct Trigger Table is the Ace's most important duty!" (plus bringing Greg doughnut)





# Crate Editor

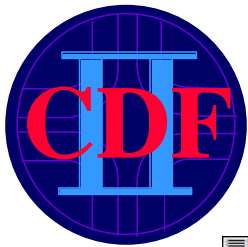
W. Badgett  
Run Control &  
Run Configuration  
01/16/2002



CrateEditor shows  
which cards will be  
read out, grouped  
by bank

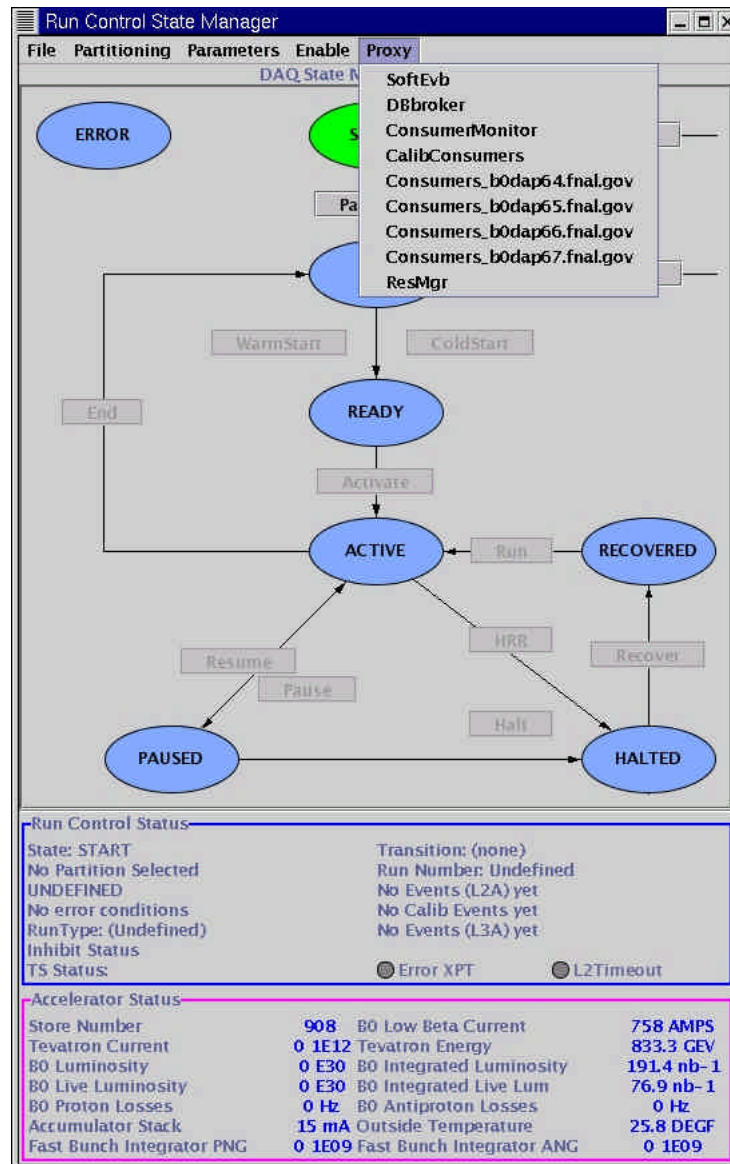
Cards can be  
removed from  
readout, but  
only in  
**emergencies**  
Notify expert  
*immediately* if  
you remove a  
card!

Component expert? Select card and press *Edit* for  
more info on the card  
Use caution when changed database connection



# Proxy Control Menu

W. Badgett  
Run Control &  
Run Configuration  
01/16/2002



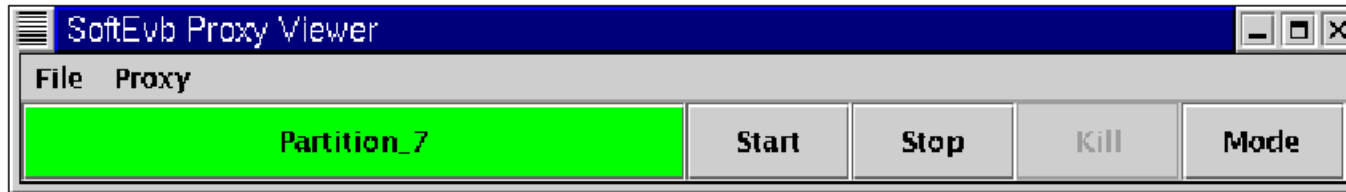
The Proxy gives you control over remote data acquisition processes:

- Software Event Builder
- Database Broker (not yet)
- Consumer Monitor
- Calibration Consumers
- Resource Manager
- Physics Consumers (to be implemented)



## SoftEvb Proxy Viewer

W. Badgett  
Run Control &  
Run Configuration  
01/16/2002

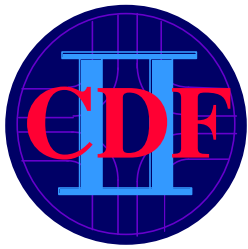


If you don't get responses from the Software Event Builder during transitions, then check the SoftEvb Proxy, and stop and/or restart if needed

Status colors:

- Green: Up and running
- Cyan: not running

Click on main button for detailed information



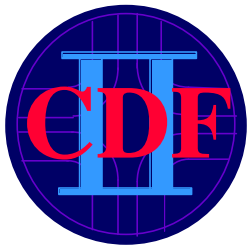
# CalibConsumer Proxy

W. Badgett  
Run Control &  
Run Configuration  
01/16/2002

Proxy	Start	Stop	Kill	Mode
QJE_0	Start	Stop	Kill	Mode
LED_0	Start	Stop	Kill	Mode
XEF_0	Start	Stop	Kill	Mode
COTCTT_0	Start	Stop	Kill	Mode
CESCALIB_0	Start	Stop	Kill	Mode
TOFQJE_0	Start	Stop	Kill	Mode
TrigMon_0	Start	Stop	Kill	Mode
YMon_0	Start	Stop	Kill	Mode

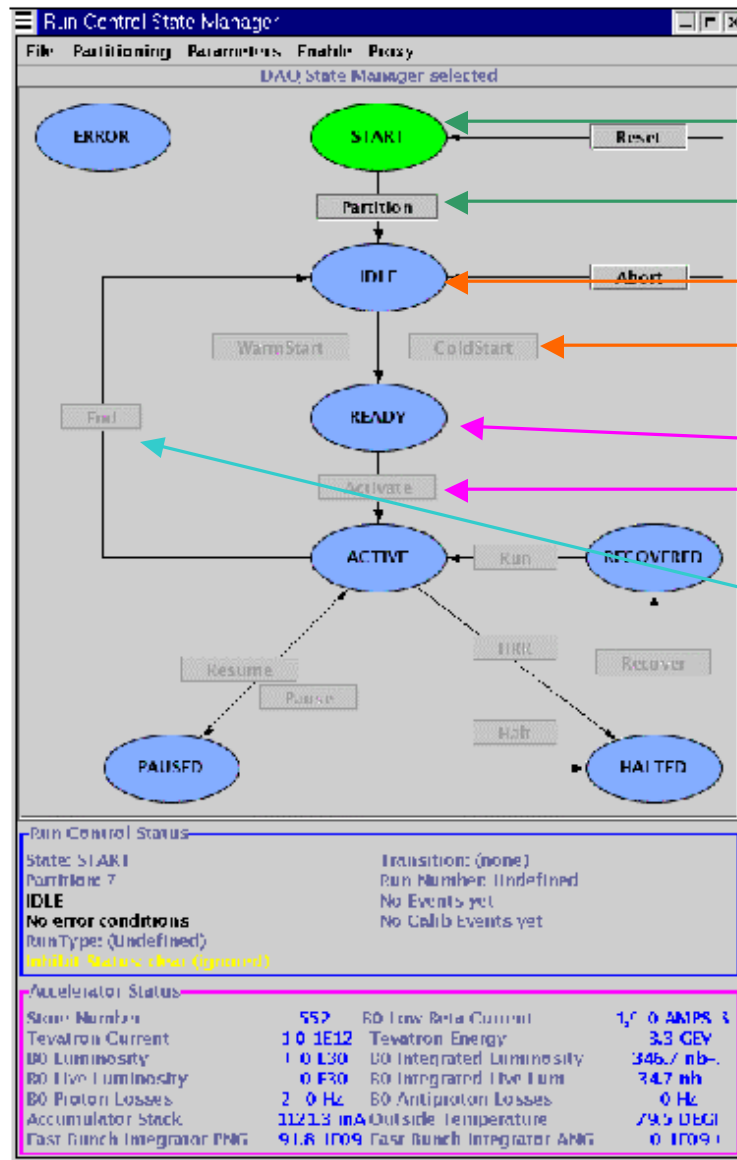
Use the Calibration Consumer Proxy to see if your calibration consumer is still running





# Transition Sequencing

W. Badgett  
Run Control &  
Run Configuration  
01/16/2002



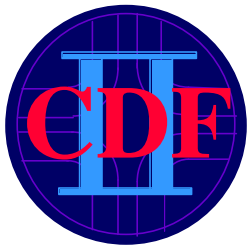
At *Start* state, select all desired clients and *Partition*

At *Idle* state, configuration must be fixed, then *ColdStart*

At *Ready* state, *Activate*

When *Active* and ready to finish run, *End*  
To fix timeouts, try *Halt Recover Run*

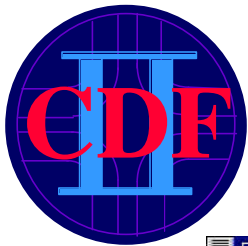
*Abort* and *Reset* always available to get you out of sticky situations  
**Use sparingly!**



## Transitions

W. Badgett  
Run Control &  
Run Configuration  
01/16/2002

- **Partition**: Select front end crates and clients for the run; configure trigger and return crosspoints
- **WarmStart/ColdStart**: Configure crates and clients with info that could change run by run (slow)
  - **ColdStart**: Full download (when in doubt, ColdStart)
  - **WarmStart**: Selected clients do limited download when no changes
- **Activate**: Final step to enable system to take data (fast)
- **End**: Normal end of run, produces end of run summaries
- **Abort**: Return to Idle when no other option available
- **Pause**: Briefly stop data taking (HV trips, flying wires, inhibits)
- **Halt/Recover/Run**: Fast system error recovery



# Calibration State Managers

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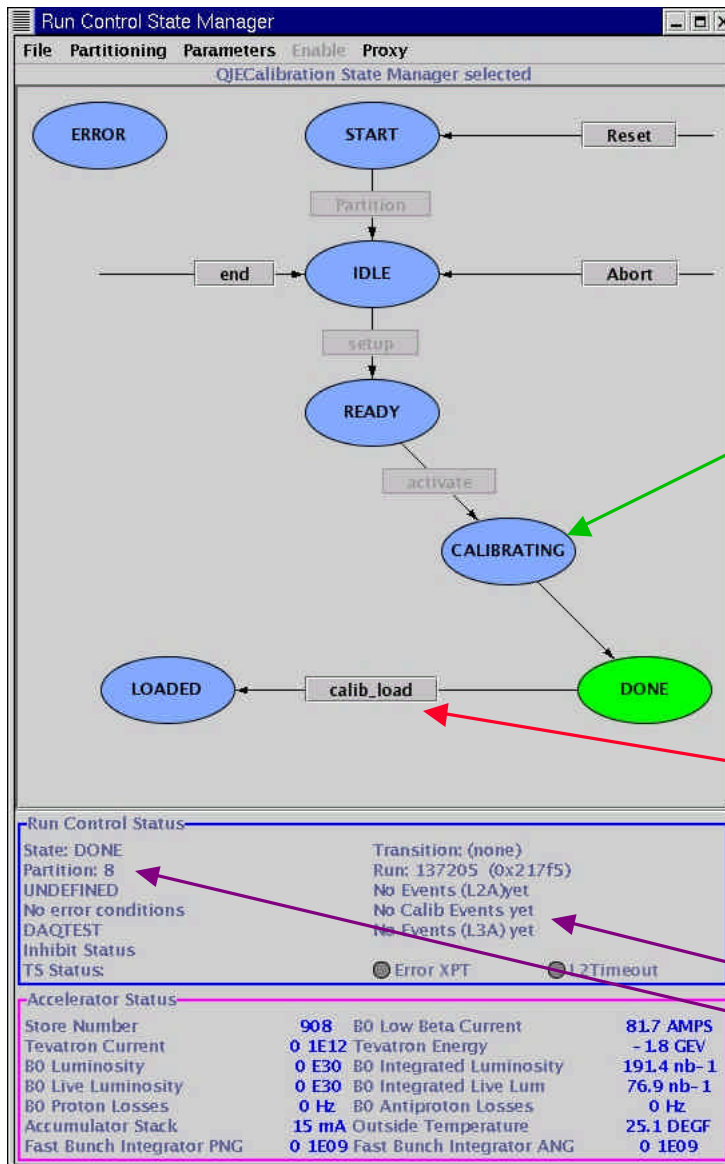
## QIE Calibration State Manager

*Calibrating*: Transitory state, will drop to Done when all front end crates are complete

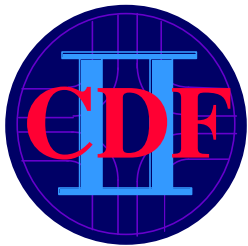
*Know where Calibration Consumer log files are kept:*  
~cdfdaq/consumers/log

*CalibLoad* special option to do full download of AdMem FRAMs, by expert request only

Calibration may be done in software, no hardware triggers are generated







## Sample Transition Errors

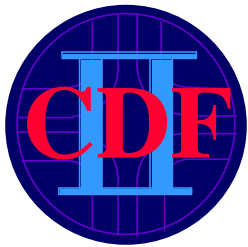
W. Badgett  
Run Control &  
Run Configuration  
01/16/2002

```
*** Run Configuration Invalid ***  
File  
Strange (but not necessarily fatal) Run Configuration  
Crate CCAL_00 missing from run  
Crate CCAL_01 missing from run  
Crate CCAL_02 missing from run  
Crate CCAL_03 missing from run  
Crate CCAL_04 missing from run  
Crate CCAL_05 missing from run  
Crate CCAL_06 missing from run  
Crate CCAL_07 missing from run  
Crate CCAL_08 missing from run  
Crate CCAL_09 missing from run  
Crate CCAL_10 missing from run  
Crate CCAL_11 missing from run  
Crate CCAL_12 missing from run  
Crate CCAL_13 missing from run  
Crate CCAL_14 missing from run  
Crate CCAL_15 missing from run  
Crate CLC_00 missing from run  
Crate CLC_01 missing from run  
Crate CMP_00 missing from run  
Crate CMU_00 missing from run  
Crate CMU_01 missing from run  
Crate CMX_00 missing from run  
Crate CMX_01 missing from run  
Crate COT_00 missing from run  
Crate COT_01 missing from run  
Crate COT_02 missing from run
```

During your Run Control session, you will sometimes see warning messages pop up  
This example tells you are missing some important crates during a beam physics run

Do **NOT** ignore any of these messages!

If you do not understand a message, contact the appropriate expert immediately



## Reply & Acknowledgments Window

W. Badgett  
Run Control &  
Run Configuration  
01/16/2002

Replies and Acknowledgements from our clients	
Parth 7:	b0cot03
b0puls01	b0tsi00
b0tsi01	b0tsi02
csl	errlog
sevb07	

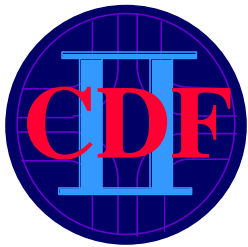
Window should  
always be visible

Words too small to read?  
Stretch the window!

This window indicates the transition status of clients:

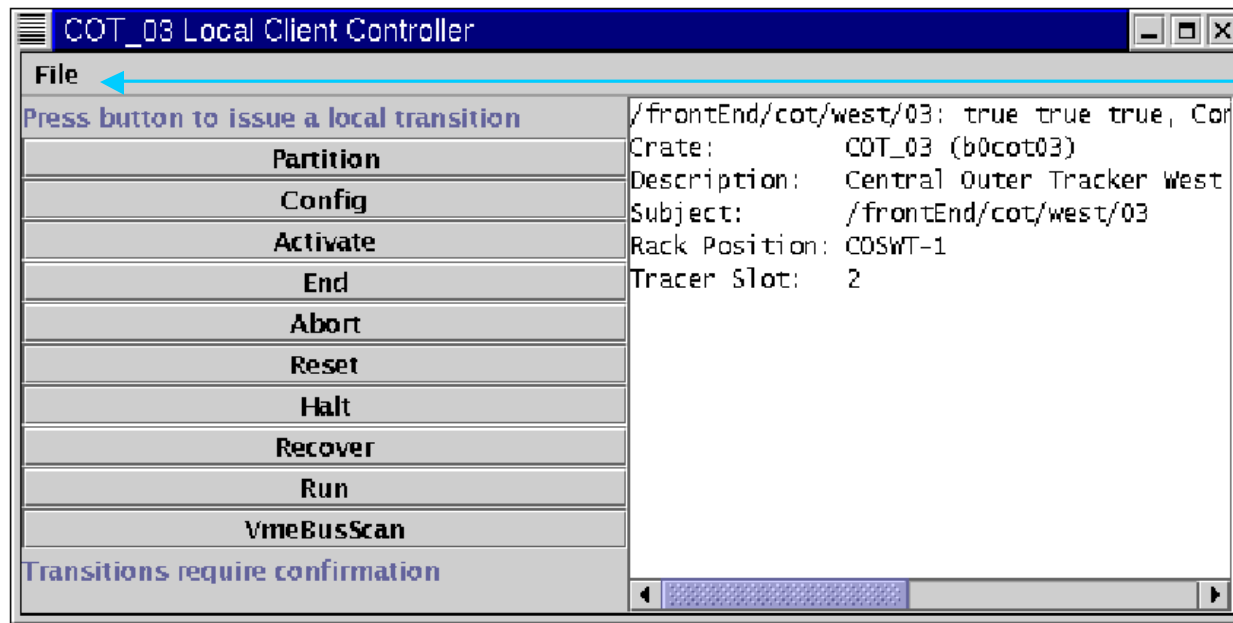
- Butter yellow: RC has not sent transition
- Margarine yellow: RC has send transition, waiting for acknowledgment
- Green Client sent successful acknowledgment
- Red Client sent error

Click on the client button for more info and the client's  
*Local Controller*



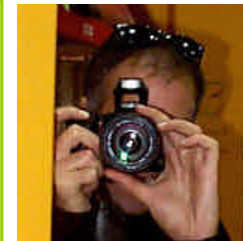
## Local Client Controller

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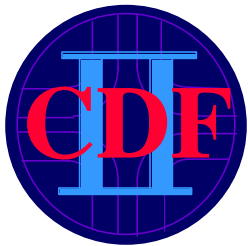


File menu gives you access to the contents of the configuration messages sent to the client

Allows you to shepherd individual clients through the transitions  
Can be used if one client out of many fail a transition  
Be careful to retain the same configuration!!



Avi sez: "We need a mouse click database!"



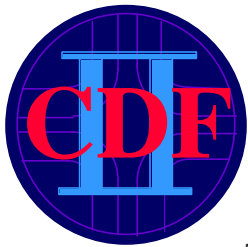
## VmeBusScan Button

W. Badgett  
Run Control &  
Run Configuration  
01/16/2002

```
b0cot03 VmeBusScan
File
VmeBusScan message
PartitionId:      7
IpAddress:        131.225.237.63
Ethernet:         08:00:3e:27:c0:91
Slot: 2 Id: 0133 001 TRACER_V2.1A
Slot: 7 Id: 0575 009 MICHIGAN TDC LVDS Rev D
Slot: 8 Id: 0556 009 MICHIGAN TDC LVDS Rev D
Slot: 9 Id: 0555 009 MICHIGAN TDC LVDS Rev D
Slot: 10 Id: 0514 009 MICHIGAN TDC LVDS Rev D
Slot: 11 Id: 0704 009 MICHIGAN TDC LVDS Rev D
Slot: 12 Id: 0588 009 MICHIGAN TDC LVDS Rev D
Slot: 13 Id: 0525 009 MICHIGAN TDC LVDS Rev D
Slot: 14 Id: 0596 009 MICHIGAN TDC LVDS Rev D
Slot: 15 Id: 0595 009 MICHIGAN TDC LVDS Rev D
Slot: 16 Id: 0682 009 MICHIGAN TDC LVDS Rev D
Slot: 17 Id: 0635 009 MICHIGAN TDC LVDS Rev D
Slot: 18 Id: 0714 009 MICHIGAN TDC LVDS Rev D
Slot: 19 Id: 0522 009 MICHIGAN TDC LVDS Rev D
Slot: 20 Id: 0589 009 MICHIGAN TDC LVDS Rev D
Slot: 21 Id: 0655 009 MICHIGAN TDC LVDS Rev D
```

Choosing VmeBusScan  
from the Local Controller  
window returns a scan of all  
cards in the front end crate

Useful for verifying the  
presence and basic  
functionality of readout  
cards



## End of Run Status Box

W. Badgett  
Run Control &  
Run Configuration  
01/16/2002

Run Comments

File

Enter your name and pertinent Run informations, purpose and conditions

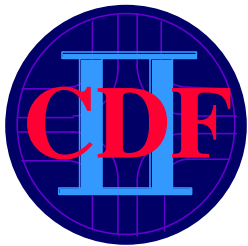
Test run only.  
No beams during run; no need to process run on production farm.

Run: 118686 Name: badgett State: TERMINATE Enter Close

Overall Run Quality Status ☐ Potentially Good ☒ Definitely Bad Check one box (required)

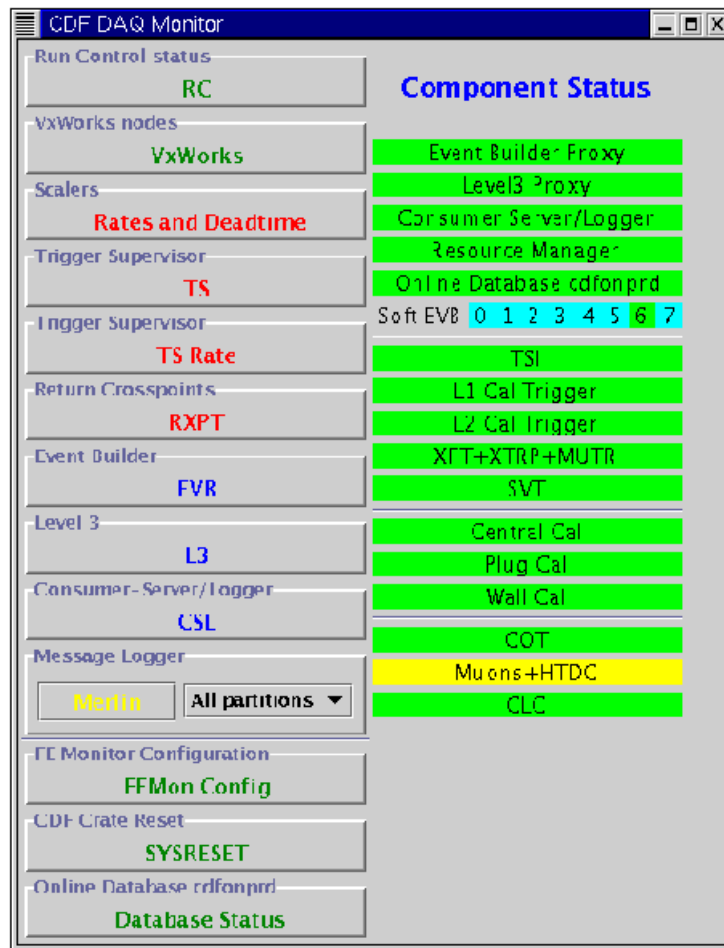
At the end of a run you will be presented with a comment box: enter any pertinent run informations

At the end of a beam physics run, you must also decide the basic run quality. When in doubt, choose *Potentially Good*  
*Determines whether run is processed offline!*



# DaqMon

W. Badgett  
Run Control &  
Run Configuration  
01/16/2002



Watching Run Control status is  
your first line of defense  
Plus, many monitoring tools are  
available

DaqMon is your gateway to  
many monitors:  
setup for  
daqmon  
And provides a quick glimpse status  
of all systems



**ODF VxWorks System Monitor**

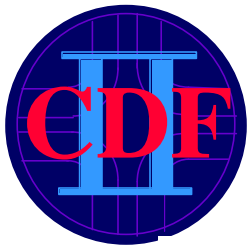
Help 19-Jul-01 11:42:02

☒ b0tsi00 ... b0tsi03; b0vrb00 ... b0vrb05; b0svx00 ... b0svx08; b0-i000 ... b0-i007; b0cl000 ... b0cl001  
☒ b0l1000 ... b0l1005; b0cxf00 ... b0cxf06; b0l1g00; b0l2000 ... b0l2005; b0svt00 ... b0svt07; b0l2de00 ... b0l2de01  
☒ b0ccal00 ... b0ccal15; b0ccal00 ... b0pcal11; b0wcal00 ... b0wcal07; b0cfd00  
☒ b0ccs00 ... b0cct10; b0cmu00 ... b0mutr00; b0cl000 ... b0cl001

b0tsi00	T SHU	b0tsi01	T SHU	b0tsi02	T SHU	b0tsi03	T SHU	b0vrb00	T SHU	b0vrb01	T SHU	b0vrb02	T SHU	b0vrb03	T SHU	b0vrb04	T SHU
b0vrb05	T SHU	b0svx00	T SHU	b0svx01	T SHU	b0svx02	T SHU	b0svx03	T SHU	b0svx04	T SHU	b0svx05	T SHU	b0svx06	T SHU	b0svx07	T SHU
b0svx08	T SHU	b0fib00	T SHU	b0fib01	T SHU	b0fib02	T SHU	b0fib03	T SHU	b0fib04	T SHU	b0fib05	T SHU	b0fib06	T SHU	b0fib07	T SHU
b0cl000	T SHU	b0cl001	T SHU	b0cl002	T SHU	b0cl003	T SHU	b0cl004	T SHU	b0cl005	T SHU	b0cl006	T SHU	b0cl007	T SHU	b0cl008	T SHU
b0cl009	T SHU	b0cl010	T SHU	b0cl011	T SHU	b0cl012	T SHU	b0cl013	T SHU	b0cl014	T SHU	b0cl015	T SHU	b0cl016	T SHU	b0cl017	T SHU
b0cl018	T SHU	b0cl019	T SHU	b0cl020	T SHU	b0cl021	T SHU	b0cl022	T SHU	b0cl023	T SHU	b0cl024	T SHU	b0cl025	T SHU	b0cl026	T SHU
b0cl027	T SHU	b0cl028	T SHU	b0cl029	T SHU	b0cl030	T SHU	b0cl031	T SHU	b0cl032	T SHU	b0cl033	T SHU	b0cl034	T SHU	b0cl035	T SHU
b0cl036	T SHU	b0cl037	T SHU	b0cl038	T SHU	b0cl039	T SHU	b0cl040	T SHU	b0cl041	T SHU	b0cl042	T SHU	b0cl043	T SHU	b0cl044	T SHU
b0cl045	T SHU	b0cl046	T SHU	b0cl047	T SHU	b0cl048	T SHU	b0cl049	T SHU	b0cl050	T SHU	b0cl051	T SHU	b0cl052	T SHU	b0cl053	T SHU
b0cl054	T SHU	b0cl055	T SHU	b0cl056	T SHU	b0cl057	T SHU	b0cl058	T SHU	b0cl059	T SHU	b0cl060	T SHU	b0cl061	T SHU	b0cl062	T SHU
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b0cl072	T SHU	b0cl073	T SHU	b0cl074	T SHU	b0cl075	T SHU	b0cl076	T SHU	b0cl077	T SHU	b0cl078	T SHU	b0cl079	T SHU	b0cl080	T SHU
b0cl081	T SHU	b0cl082	T SHU	b0cl083	T SHU	b0cl084	T SHU	b0cl085	T SHU	b0cl086	T SHU	b0cl087	T SHU	b0cl088	T SHU	b0cl089	T SHU
b0cl090	T SHU	b0cl091	T SHU	b0cl092	T SHU	b0cl093	T SHU	b0cl094	T SHU	b0cl095	T SHU	b0cl096	T SHU	b0cl097	T SHU	b0cl098	T SHU
b0cl099	T SHU	b0cl100	T SHU	b0cl101	T SHU	b0cl102	T SHU	b0cl103	T SHU	b0cl104	T SHU	b0cl105	T SHU	b0cl106	T SHU	b0cl107	T SHU
b0cl108	T SHU	b0cl109	T SHU	b0cl110	T SHU	b0cl111	T SHU	b0cl112	T SHU	b0cl113	T SHU	b0cl114	T SHU	b0cl115	T SHU	b0cl116	T SHU
b0cl117	T SHU	b0cl118	T SHU	b0cl119	T SHU	b0cl120	T SHU	b0cl121	T SHU	b0cl122	T SHU	b0cl123	T SHU	b0cl124	T SHU	b0cl125	T SHU
b0cl126	T SHU	b0cl127	T SHU	b0cl128	T SHU	b0cl129	T SHU	b0cl130	T SHU	b0cl131	T SHU	b0cl132	T SHU	b0cl133	T SHU	b0cl134	T SHU
b0cl135	T SHU	b0cl136	T SHU	b0cl137	T SHU	b0cl138	T SHU	b0cl139	T SHU	b0cl140	T SHU	b0cl141	T SHU	b0cl142	T SHU	b0cl143	T SHU
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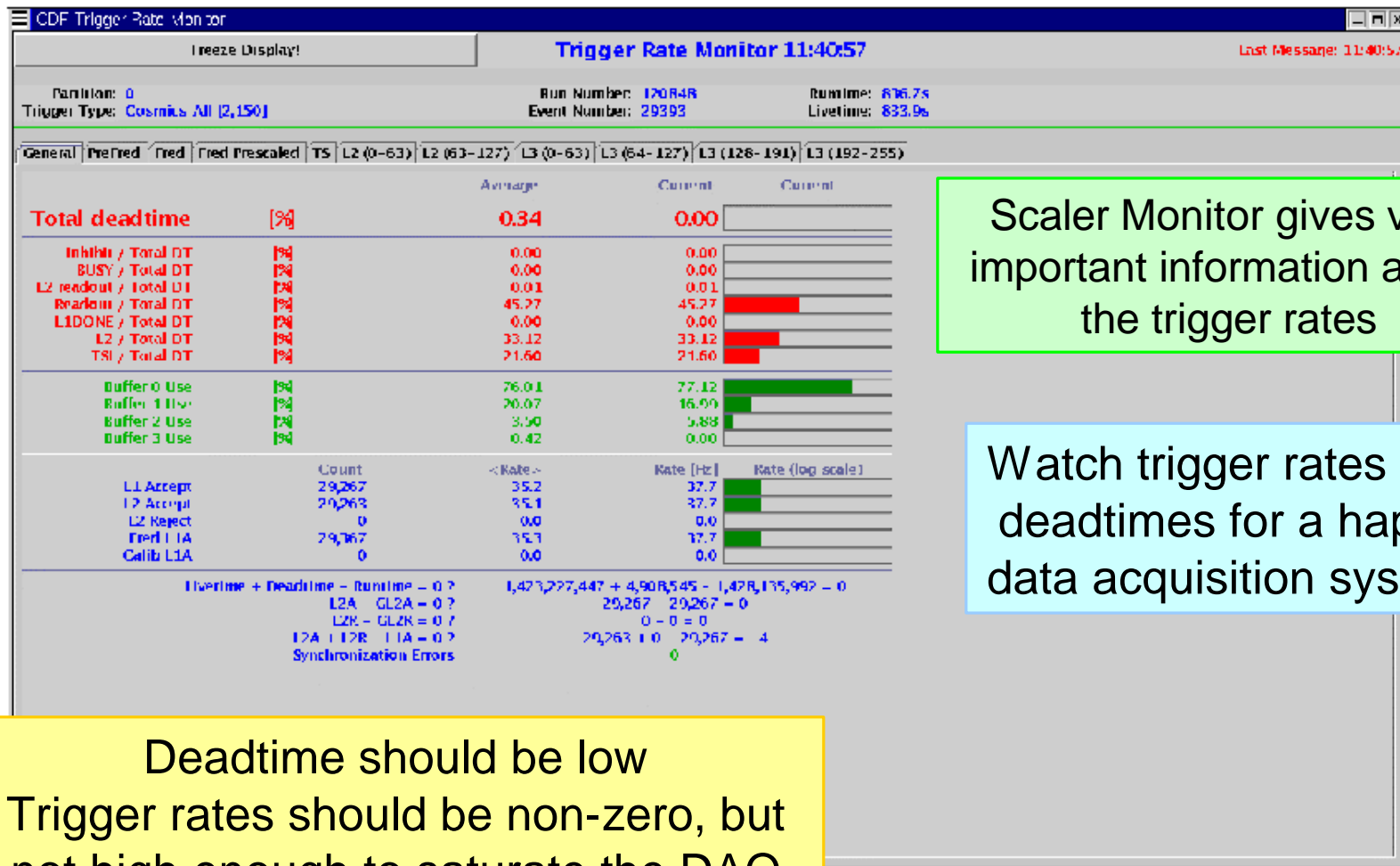
*Arnd* sez: “Monitoring the Front End crates is the Ace’s most important job”



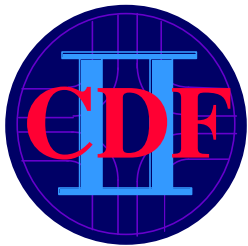


# ScalerMonitor

W. Badgett  
Run Control &  
Run Configuration  
01/16/2002







## Conclusion

W. Badgett  
Run Control &  
Run Configuration  
01/16/2002

- DAQ Ace's main responsibility is operation of Run Control
- Before your shift, come to CDF control room and try out Run Control features, learn from experienced Aces and other DAQ experts
- Don't understand a feature or warning? Don't ignore! Find out! Page experts if necessary!